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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,779	07/31/2003	Jeffrey E. Swensen	PK-US035069	7892
22919	7590	01/24/2006	EXAMINER	
SHINJYU GLOBAL IP COUNSELORS, LLP			PATEL, VISHAL A	
1233 20TH STREET, NW, SUITE 700			ART UNIT	
WASHINGTON, DC 20036-2680			PAPER NUMBER	

3673

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/630,779

Applicant(s)

SWENSEN ET AL.

Examiner

Vishal Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/28/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 33-47 and 65 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-32 and 48-64 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 12-17 is/are rejected.
- 7) ☐ Claim(s) 3-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/28/05.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 12, 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt (US. 2,867,482).

Schmidt discloses a metallic seal having a central annular portion (37) extending around a central axis (central axis similar as to figure 7), the central annular portion having a first end and a second end (ends of the central portion), a first annular leg portion extending from the first end to the central portion to an annular free end (free end 16), the first annular leg portion having a first annular convex sealing surface (convex sealing surface that contacts 13) lying in a first sealing plane (first sealing plane having surface parallel to 13), a second annular leg portion extending from the second end of the central portion to a second free end (end near 17), the second annular leg portion having a second convex sealing surface lying in a second sealing plane (second sealing plane having surface parallel to 19), the second free end of the second leg portion having an annular flange (17) substantially parallel to the first and second sealing planes (17 is substantially parallel to the first and second sealing planes) and offset (offset from the second sealing plane) from the second sealing plane in an axial direction towards the first sealing plane (the thickness of the flange extends axially toward the first sealing plane).

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The annular flange of the second free end extends in a radial direction away from the central annular portion at least as far as the first end (this is the case since the second end extends beyond the first end).

The seal has a substantially C-shape transverse cross-sectional profile as viewed in a peripheral direction (the seal is a C-shape seal).

The seal is a single piece seal.

The first and second leg portions extend outwardly from the central annular portion in a radial direction away from the central axis.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Grein et al (US. 4,640,455).

Schmidt discloses the invention substantially as claimed above but fails to disclose that the seal is substantially rectangular as viewed along the central axis and has rounded corners. Grein et al teaches to have a seal that has several shapes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the seal of Schmidt to have a seal that is rectangular as taught by Grein, since having a circular or triangular or rectangular seal is considered to be art equivalent. Furthermore the reason to choose a rectangular seal is to provide a seal for a part that is rectangular or an opening that is rectangular.

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5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Moyers (US. 3,195,906).

Schmidt discloses the invention substantially as claimed above but fails to disclose that the leg portions extend inwardly from the central annular portion in a radial direction toward the central axis. Moyers discloses a first embodiment, where a gasket that has a seal that extends radially inward (figure 3 and seal 33) and in a second embodiment the seal extends radially outward (figure 7 and seal 61). The reason for extending seals in different radial directions is to seal an opening at an inner periphery or to seal an opening at an outer periphery (figure 7). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the seal of Schmidt to be reversed to be extending radially inwardly as taught by Moyers, to seal an inner peripheral portion of an opening or a member (in this particular case a piston rod instead of a cylinder around a piston).

***Allowable Subject Matter***

6. Claims 3-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 18-32 and 48-64 are allowed.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Halling teaches a central portion (where numeral 70 points at), first convex portion extending outwardly from 70, second convex portion extending inwardly 70, the second convex

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portion having a flange (72) that is parallel to the sealing planes of the convex portions. Abbas et al also teaches that is similar to applicants seals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 571-272-7049. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP  
January 17, 2006

A handwritten signature in black ink, appearing to read 'Vishal Patel', with a stylized flourish at the end.

Vishal Patel  
Patent Examiner  
Tech. Center 3600